

Exhibit 5

**Excerpts from the Corrected
Post-Injunction Expert Report of
Barbara Ann Frederiksen-Cross
REDACTED**

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEVADA

<p>ORACLE USA, INC.; a Colorado corporation; ORACLE AMERICA, INC.; a Delaware corporation; and ORACLE INTERNATIONAL CORPORATION, a California corporation,</p> <p>Plaintiffs,</p> <p>v.</p> <p>RIMINI STREET, INC., A NEVADA CORPORATION; AND SETH RAVIN, AN INDIVIDUAL,</p> <p>Defendants.</p>	<p>CIVIL CASE NO. 2:10-cv-0106</p> <p>LRH-VCF</p>
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Corrected Post-Injunction Expert Report of Barbara Ann Frederiksen-Cross

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laptop to a Rimini system such as [REDACTED]⁶⁾ creates a reproduction of that Oracle file. So, too, does attaching a file to an e-mail, a Salesforce task, or uploading it to an entry in Jira or Spira.

82. Creating a screenshot of Oracle software or of the contents of individual Oracle files such as source code or documentation is also an act of reproduction.

83. Finally, as discussed in my *Rimini II* expert reports, each time Rimini uses the PeopleSoft, JD Edwards, or Oracle Database software, this use results in the creation of copies of Oracle protected software in the computer's Random Access Memory ("RAM"). Such in-memory copies are necessarily created when software is used, because a computer-readable version of the software is loaded into the memory of the user's computer so that its instructions can be interpreted and acted upon by the computer. In addition, development, testing, and distribution all result in the creation of RAM copies.⁵⁷

E. DERIVATIVE WORKS

84. As noted herein and in my *Rimini II* reports, I understand a "derivative work" is, in relevant part, "a work based upon one or more preexisting works, such as a translation . . . or any other form in which a work may be recast, transformed, or adapted." As one example, a developer that adds code to expand the functionality of an existing PeopleSoft SQR program creates a derivative work of the original SQR (and may, in the process, copy the original SQR). As another example, a derivative work results when Rimini modifies or extends PeopleSoft environments through new updates, extending the features and functionality of the existing PeopleSoft software while relying on the underlying PeopleSoft architectural framework instead of operating independently from the PeopleSoft components upon which they rely. When Rimini applies such updates to existing PeopleSoft environments, the result is the creation of derivative PeopleSoft environments.⁵⁸

F. DISTRIBUTIONS

85. When Rimini distributes an update to customers, it does not simply pass the

⁵⁶ Mackereth Rule 30(b)(6) Depo., Ex. 1842 [REDACTED]; Mackereth Rule 30(b)(6) Depo. at 207:9-208:1, 208:15-210:15 (admitting [REDACTED]).

⁵⁷ *E.g.*, Frederiksen-Cross Supp. Report ¶¶ 181 (discussing PeopleSoft), 294-95 (discussing PeopleSoft), 451-454 (discussing JD Edwards), 516-18 (discussing Oracle Database).

⁵⁸ *E.g.*, *id.* ¶¶ 182, 224, 235, 276-293.

Rimini's corporate representative could not confirm whether

4. Dev Instructions

98. I reviewed Rimini’s response to Supplemental Interrogatory No. 1, in which Rimini describes the “Dev Instructions” that now are part of its update methodology. Rimini states [REDACTED]

⁸³ Rimini later admitted that

84

99. The explanation above details several facts about Rimini’s development process that are consistent with my observations, although I provide some clarification and identify some points with which I disagree below. First, I disagree that Rimini’s Dev Instructions provide [REDACTED] as this characterization suggests incorrectly that Dev Instructions [REDACTED]

[REDACTED]. While I understand that Rimini’s business analysts sometimes generate requirements documents that could be characterized as conveying [REDACTED] [REDACTED] Dev Instructions are a world apart from those requirements documents.⁸⁵

100. Instead, Dev Instructions are the result of software development, and are created from (and, as discussed below, are often derivative works based upon) Oracle software. By documenting its initial development work for one client in a Dev Instruction, Rimini's work to develop and test code (and to determine what code to create, modify, or delete) is substantially reduced if it uses that Dev Instruction when supporting additional clients. As noted in my

⁸² Mackereth Rule 30(b)(6) Depo. at 184:23-185:6.

⁸³ Rimini's July 18, 2019 Corrected First Supp. and Second Supp. Response to Oracle's Supp. Interrogs. at pp. 7-8. *See also* Mackereth Rule 30(b)(6) Depo. at 218:23-219:1.

⁸⁴ ECF No. 1297 (Rimini's Dec. 16, 2019 Opposition to Oracle's Motion to Compel) at 22.

⁸⁵ Sept. 9, 2015 Depo. of Shelley Blackmarr (“Blackmarr Depo.”) at 89:6-90:18.

description of Jira, this time-savings is substantial. For example, initial development work for HCM200511/440 took about a [REDACTED], while development and testing for all Kanban customers, where Rimini engineers were directed to use the Dev Instructions, took under [REDACTED]

[REDACTED]⁸⁶

101. The testimony of Rimini's corporate representative does not alter my opinions that Rimini saves substantial time and effort by creating and relying upon Dev Instructions, that Rimini creates those Dev Instructions through the copying and use of Oracle software (including source code), and that they are far more than mere [REDACTED]

[REDACTED] Mr. Mackereth testified that that [REDACTED]

[REDACTED] He could not explain what would happen if [REDACTED]

[REDACTED] and he did not assert that [REDACTED]

[REDACTED]⁸⁸

102. Rimini's assertion that [REDACTED]

[REDACTED] is not inconsistent with my analysis of the Dev Instructions, though I note that [REDACTED], and [REDACTED]

[REDACTED]. However, Rimini omits that its engineers also create derivative works in the course of creating Dev Instructions. Several of the Dev Instructions I viewed contained [REDACTED]

[REDACTED]⁸⁹ Others contained [REDACTED]⁹⁰ Such reference to [REDACTED] and [REDACTED] is only plausible if the Rimini engineer or engineers writing the Dev Instruction are generating and testing modifications to Oracle code. In

⁸⁶ ORCLRSJIRA00000121 and ORCLRSJIRA00000460 (PUSP-16095 and PUSP-16643).

⁸⁷ Mackereth Rule 30(b)(6) Depo. at 219:5-14.

⁸⁸ Mackereth Rule 30(b)(6) Depo. at 220:18-221:7.

⁸⁹ For example, RSI006954036.

⁹⁰ ECF No. 1290-3 (Declaration of Barbara A. Frederiksen-Cross, Exhibit 2); ECF No. 1290-5 (Declaration of Barbara A. Frederiksen-Cross, Exhibit 4 (Oracle GA file [REDACTED])); ECF No. 1290-1 (Declaration of Barbara A. Frederiksen-Cross ¶ 12). As discussed below, I further understand that such copying and saving of Oracle source code violates the Injunction in this case.

such cases, Dev Instructions are, at a minimum, designed to allow Rimini to reproduce derivative works (including both modified versions of PeopleSoft software and modified, individual source code files) created from and with one environment on other environments. If they contain either source code or sufficiently detailed pseudocode that modifies or extends existing Oracle software, the Dev Instructions are also derivative works in their own right.

103. I also generally agree that, with respect to the development and testing of software updates, [REDACTED]

[REDACTED]⁹¹ A basic tenet of software development is that modifications to existing code typically require review of the existing code to determine what should be changed, and how to integrate the new changes with the existing code. After code is modified the code needs to be tested. For enterprise software like PeopleSoft, code generally needs to be tested in a non-production environment before it can be safely added to the main server. There is no way to test a PeopleSoft update without running it in an Oracle PeopleSoft environment.

104. However, the statement that [REDACTED] is at best incomplete. Given that, as discussed above, Oracle code was copied into Dev Instructions, it seems likely that the Dev Instructions were created, at least in part, on or using Oracle software environments.

105. I also believe Rimini's statement that [REDACTED] is incomplete and misleading. As I discuss below, in many cases, Rimini does not access client systems, but instead, has accessed Oracle Software environments hosted on servers owned and operated by Windstream. For instance, Rimini has used environments associated with [REDACTED].⁹² I reviewed the deposition transcript of [REDACTED], 30(b)(6) designee, which confirmed that the Development and Test environments associated with [REDACTED] and that [REDACTED] itself has no access to these environments.⁹³

106. Finally, I understand that Rimini contends that all material it has copied and used is [REDACTED] I disagree with this

⁹¹ ECF No. 1297 (Rimini's Opposition to Oracle's Motion to Compel) at 22.

⁹² Ex. 40, Combined Environment Spreadsheet.

⁹³ Sept. 20, 2019 Rule 30(b)(6) Deposition of Easter Seals ("Hoyt Rule 30(b)(6) Depo.") at 47:8-50:11, 55:16-56:6.

contention. All Oracle licenses impose significant restrictions on the copying and use of the licensed software and documentation, and Rimini's copying and use of that software and documentation may not be within the scope of a given customer's license. In particular, I understand that no Rimini customer's license permits Rimini to violate the Injunction or to commit copyright infringement. As well, in my report in *Rimini II*, I noted several instances where Rimini sent to a Rimini customer material to which the customer was not entitled.⁹⁴ Similarly, as discussed below, I have reviewed evidence of instances where a Rimini engineer has provided support to one customer by reviewing Oracle software and source code files on an environment associated with a different customer.⁹⁵

107. Rimini has also copied (in whole or in part) Oracle files or derivative works thereof to its computer systems. As Rimini does not keep complete records of files sent to customers, it cannot support the narrower statement that each file in a customer-associated environment that Rimini copied and used was one the recipient customer (not necessarily Rimini) was licensed to have copy or use under some circumstances.

5. AFW

a) *Overview of Rimini's Automated Framework (AFW) Program*

108. As discussed in my *Rimini II* reports, AFW is a piece of Rimini-written software that includes both a system for Rimini machines to communicate with remote systems through a hub-and-spoke model, with a Rimini FTP server in the middle, and a number of component utilities used in Rimini's support processes.⁹⁶ As I noted in my *Rimini II* reports, I spoke with Christian B. Hicks, with the understanding that he provided a detailed explanation about the operation of AFW in his expert report. I have also reviewed that report.⁹⁷ My understanding of how AFW works further comes from my work with my colleagues at Stroz Friedberg and my analysis of various documents produced by Rimini in this action and in *Rimini II* including, without limitation, different versions of the AFW source code, AFW documentation, depositions of Rimini employees, exhibits introduced during depositions, Rimini development documents, and Rimini employee communications.

⁹⁴ Frederiksen-Cross Supp. Report ¶¶ 522-23.

⁹⁵ See, e.g., Section IV.B.7.c.

⁹⁶ Frederiksen-Cross Supp. Report ¶ 297.

⁹⁷ I also understand that Rimini's expert, Prof. Owen Astrachan, did not disagree with Mr. Hicks as to how AFW works. *Rimini II*, Aug. 21, 2018 Astrachan Depo. at 259:2-8.

CodeAnalyzer [REDACTED] program, both are designed to maximize cross-use. Moreover, it is my opinion that Rimini's use of the AFW TransferFiles tool since November 5, 2018 has resulted in the continued cross-use of Oracle software environments.

227. At my direction, my colleagues at Stroz Friedberg analyzed AFW database records. This analysis showed that AFW distributed files with [REDACTED] different names, although because AFW records did not include a hash or other cryptographic metadata for the files, it is impossible to determine exactly how many unique files were distributed. The logs also show that [REDACTED] remote environments received files via AFW and a total of [REDACTED] file transfer cycles were completed during the Post-Injunction Period.

228. The logs also contain "job numbers" and it is my opinion that where a transfer record contains the same job number and filename but different recipient customers, the job involved a transmission of multiple copies of the same identical file to multiple customers. This conclusion has been confirmed by Rimini's attorneys, who in a letter to Oracle acknowledged thousands of AFW database records involving "the same file [being] transferred more than one time" to different customers.²³²

3. Rimini's Use of AFW [REDACTED] Constitutes Cross-Use.

229. As explained in Section III.B.5.d, Rimini's AFW source code shows that the AFW function [REDACTED]. This [REDACTED], and is cross-use in violation of the Injunction.

230. In addition, as also explained in Section III.B.5.d, [REDACTED]²³³ Because there would be no need to package these updates together unless they were developed separately, it is my opinion that the process of combining projects by using [REDACTED] is further evidence of cross-use.

4. Rimini's Prototype / Retrofit Model, Now Called Scrum and Kanban, Constitutes Cross-Use.

231. In *Rimini II*, I concluded that Rimini's development process for PeopleSoft involved developing an update on a PeopleSoft software environment associated with one

²³² Ex. 11 (Dec. 3, 2019 Letter from J. Tryck to J. Minne) at 8; Ex. 87 (Oct. 4, 2019 C. McCracken email re AFW FTP production).

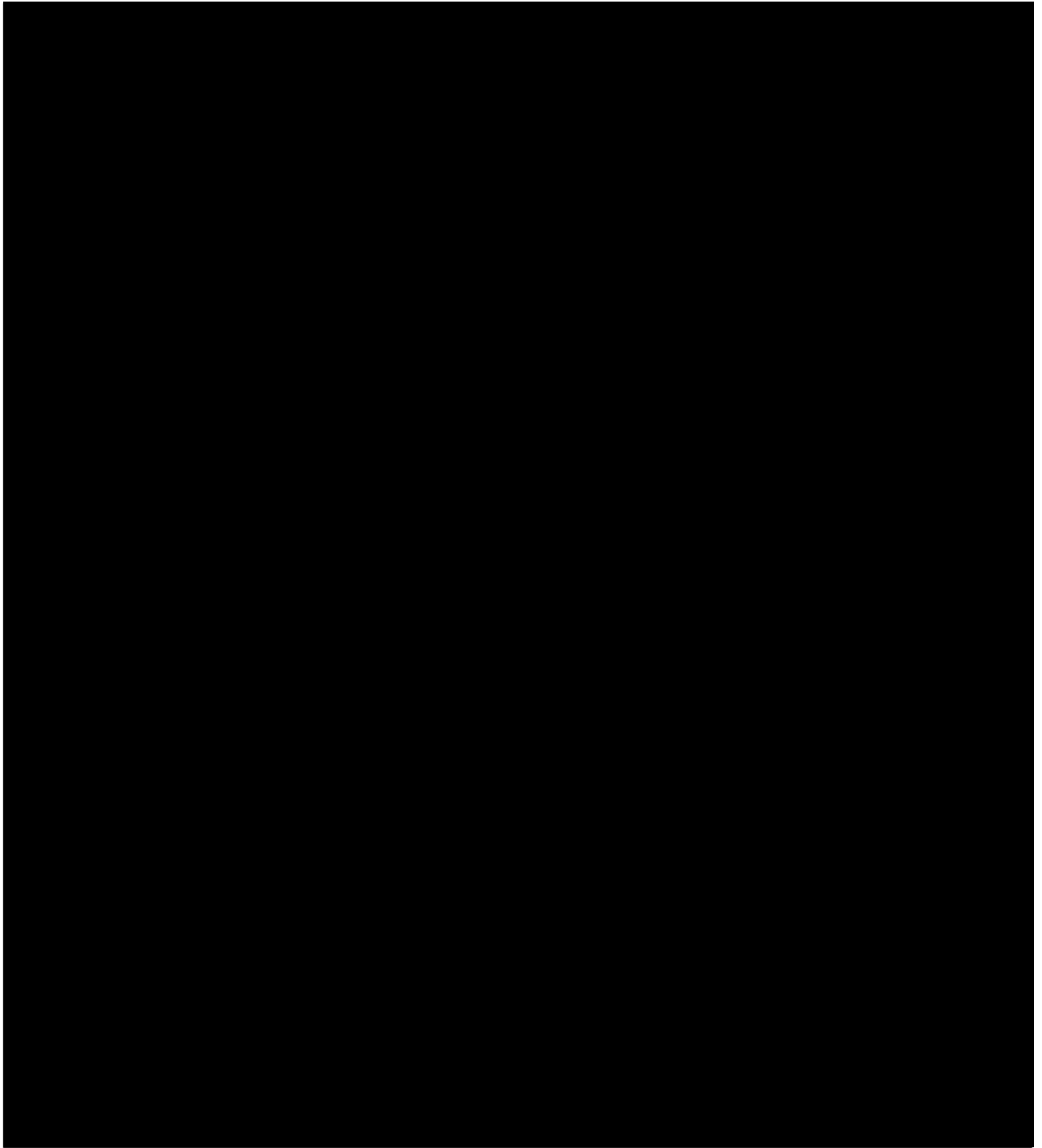
²³³ RSI007100136 [REDACTED]; RSI007100127 [REDACTED] (email attaching document).

customer, sometimes referred to as a prototype environment, and then retrofitting the update on the PeopleSoft software environments associated with other customers. Based on my review of Rimini's DevTrack and Jira records, along with documents and emails produced by Rimini in this case, it is my opinion that Rimini continues to use this same process. However, instead of using the terms "prototype" and "retrofit," Rimini has adopted the terms Scrum and Kanban, respectively.²³⁴

232. As already discussed in Section III(B)(2) above, Rimini uses a relatively small number of Scrum clients to perform the time consuming development work, saves much of that development work to Dev Instructions and other files on its local network, then rapidly copies that work to many more Kanban clients.

233. Another example of this Scrum-Kanban process is shown, in part, in the updates for HCM200443 and HCM200444 discussed above. Focusing on HCM200443, including updates to an Oracle SQR file, the Scrum work was tracked at PUSP-14966. The Scrum entry shows that development for the ten Scrum customers was completed using one week and two days of developer time, and included a number of development tasks, including creating the "Tech Doc," Development across the Scrum clients, QA Testing, and QA analysis

²³⁴ Mackereth Rule 30(b)(6) Depo. at 210:17-217:7 [REDACTED]).
 218:18-219:1 [REDACTED]). Rimini sometimes uses the term [REDACTED]
 [REDACTED] RSI007126919 at slide 23.



234. Even assuming material was not cross-used between Scrum clients (which is unlikely), this indicates that development of the necessary fix should take about one day per client.²³⁵

²³⁵ PUSP-14966 (ORCLRSJIRA00000376).

235. However, the Kanban team moved at a much faster pace.²³⁶ Using work from the earlier development, development tasks were streamlined and no longer required QA Analysis:

[REDACTED]

236. For the remaining [REDACTED]

[REDACTED]

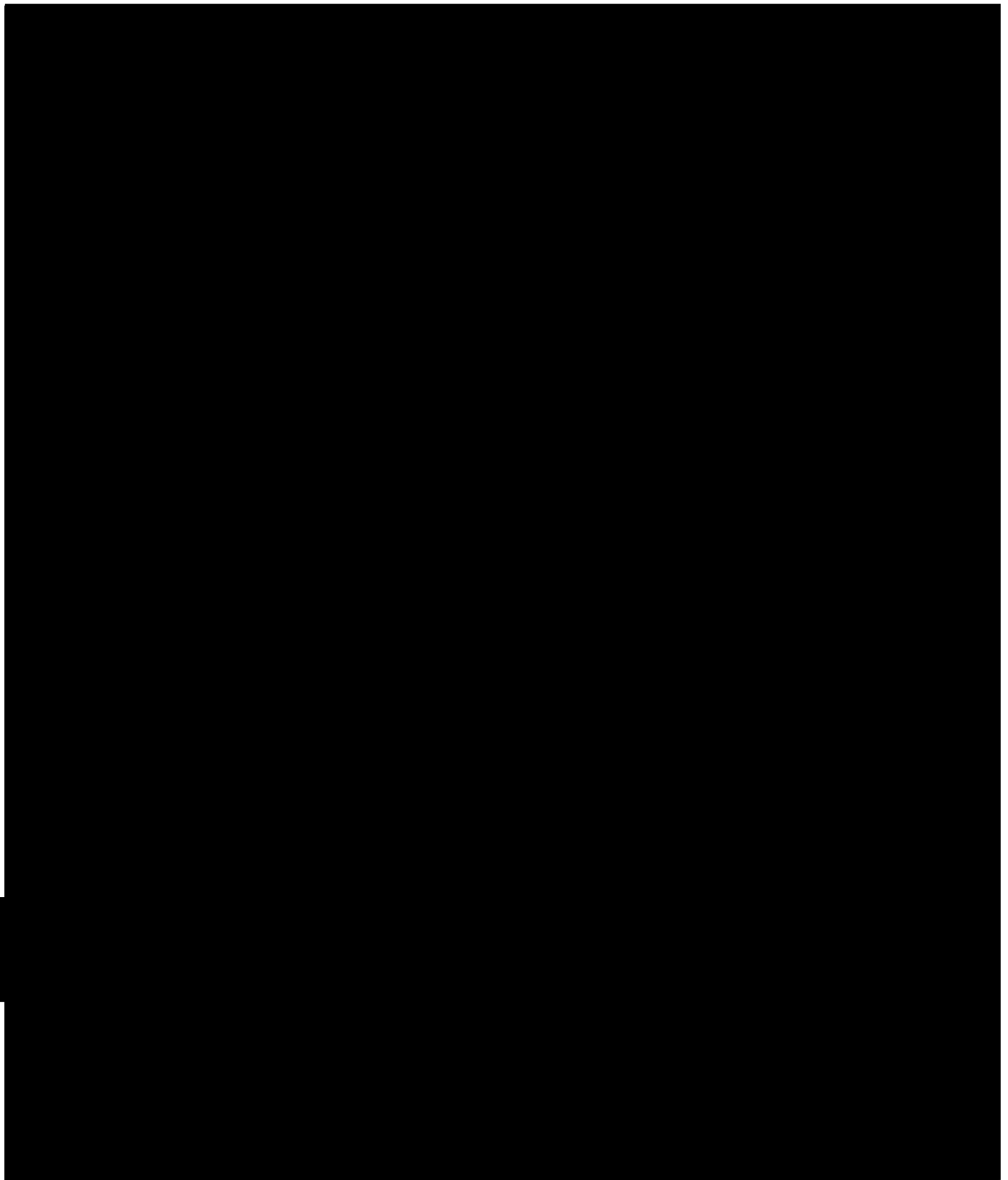
[REDACTED] And this is likely an overestimate, as it assumes Rimini worked on each client every day (including weekends) and ignores any delays that were due to environment access issues, although at least five environment access problems are documented in the Environment Spreadsheet.

237. In short, Rimini cross-used at least one of the ten Scrum environments selected for this update as a test platform for development so that they could rapidly build and distribute the update for the remaining 72 Kanban customers.

238. This Scrum-Kanban framework is common throughout Rimini's development process. For instance, as shown in the screenshot below of Jira update PUSH-1291, this update contains comments that flag a small number of customers as Scrum and a very large number of customers as "KANBAN." In this example, only two customers are flagged as Scrum customers.

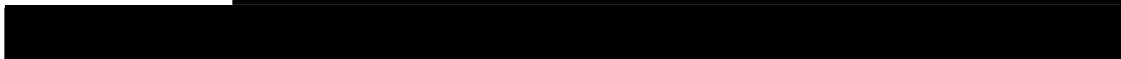
²³⁶ PUSP-15200 (ORCLRSJIRA00000400).

²³⁷ *Id.* Scrum and Kanban customers for this update are listed in RSI007899904 [REDACTED] for HCM200443).



239. Rimini's Scrum-Kanban system is also discussed in emails between developers.

For example, an



This email

²³⁸ RSI007095598 at 601.

also refers to [REDACTED]

[REDACTED] As discussed elsewhere in this report, far from being [REDACTED]

[REDACTED].²⁴⁰ Either way, this [REDACTED]

240. As another example, an [REDACTED]

[REDACTED].²⁴¹ This [REDACTED]

For example, [REDACTED]

Similarly, [REDACTED]

[REDACTED]. This is further evidence that confirms my opinion that the Kanban team is cross-using the work of the Scrum team to more quickly implement updates on Kanban customers.

241. To further increase the efficiency of this process, Rimini created a Kanban template in Jira that could be copied between updates, which was cloned [REDACTED] times.²⁴² Rimini's reliance on this template showed that for an update to be delivered to dozens of clients, there were only three key pieces of information the Kanban workers needed:

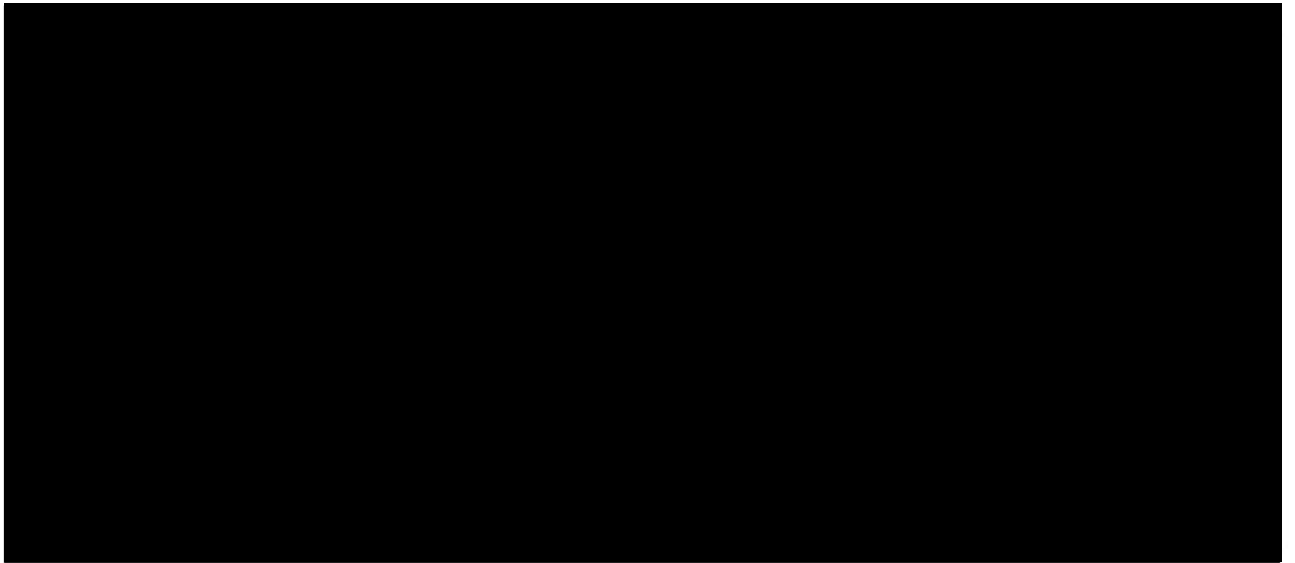
- The Dev Instructions;
- The Environment Spreadsheet (listing recipients of an update); and
- Contact information for the original development team.

²³⁹ *Id.*

²⁴⁰ See RSI007065905 at 905-906 [REDACTED]

²⁴¹ Mackereth Rule 30(b)(6) Depo., Ex. 1843 at RSI00708377-76 ([REDACTED]); Mackereth Rule 30(b)(6) Depo. at 223:10-227:1.

²⁴² ORCLRSJIRA00000406 (PUSP-15223).



242. The Jira entry indicates that during the Post-Injunction Period, this template was copied [REDACTED] times, indicating that Rimini's Scrum-Kanban process was used at least that many times. This count is also roughly consistent with my observations of the Environment Spreadsheets. Rimini produced [REDACTED] including clients designated as "Scrum." There were a total of [REDACTED] Scrum designations compared to [REDACTED] "Kanban" designations.²⁴³

5. Rimini's Creation And Use of SpiraTeam Test Cases Constitutes Cross-Use

243. It is my opinion that Rimini's use of SpiraTeam comprises cross-use of PeopleSoft software in violation of Injunction in this case. Reviewing documents from Spira indicates that Rimini designs its test cases for PeopleSoft updates using one of its customers' PeopleSoft environment and then reuses the test case to support all customers receiving the same update. The material copied includes screenshots showing the specific responses PeopleSoft software generates in response to the test sets. It also, in some instances, includes screenshots of PeopleSoft software running on customer environments. It also, in some instances, includes before-and-after comparisons of code files from PeopleSoft. The test cases are then used to enable rapid testing, and in some cases, development, in support of numerous other Rimini customer environments. Such cross-use of PeopleSoft environments has persisted since the Injunction entered into effect, and does not seem to have abated. Several examples are discussed

²⁴³ Ex. 40 (Combined Environment Spreadsheet).

[REDACTED]

286. As another example, as I noted in a recent Declaration, it is my opinion that RSI006865952 contains excerpts of Oracle source code.²⁹⁹ Line 3 of RSI006865952 references the filename “[REDACTED]” Upon analyzing RSI006865952, I have identified several lines that contain excerpts of source code. At my direction, my colleagues at JurisLogic searched Oracle GA and were able to find Oracle GA source code files named “[REDACTED]” that contain some of the lines of code in the RSI006865952. Based on these results, it is my opinion that lines 37 and 38 of the draft Dev Instruction document RSI006865952 were copied from lines 217 and 224 of the Oracle source code file [REDACTED] (HRMS 8.3). For reference purposes, I added line numbers in the left-hand margin of Exhibit 4.³⁰⁰

287. I also note that Dev Instructions often contain the language [REDACTED],” including the COBOL Dev Instructions for modifying PeopleSoft COBOL files [REDACTED] and [REDACTED] as part of Rimini update HCM200064, discussed in the previous section.³⁰¹ I did not see any indication of what this language means in any of the Dev Instructions documents I reviewed, although I understand that Rimini suggest that

[REDACTED]

[REDACTED]

[REDACTED]

²⁹⁹ ECF No. 1290-3 (Declaration of Barbara A. Frederiksen-Cross, Exhibit 2); ECF No. 1290-5, (Declaration of Barbara A. Frederiksen-Cross, Exhibit 4 (Oracle GA file [REDACTED])).

³⁰⁰ ECF No. 1290-1 (Declaration of Barbara A. Frederiksen-Cross) ¶ 12.

³⁰¹ RSI007106360 [REDACTED].

[REDACTED]

[REDACTED]³⁰² However, there is no way to confirm from the face of the document whether the statement is true, and I have seen no other documentation stating when or by whom the document was created. Moreover, it is my opinion that it would be impossible to write code like this without simultaneously having access to the file it is intended to modify, by opening it and copying it into RAM. It would also be impossible to test this code without making the change in the file itself, compiling it (in the case of COBOL), and then running it. I further understand that Rimini has admitted as much, writing “[REDACTED]

[REDACTED]³⁰³

288. Even if a Rimini developer took the artificial step of typing lines of code on his or her laptop [REDACTED], it would have been while looking at the PeopleSoft code on a development environment associated with a customer, copying the lines into the PeopleSoft code on a development environment associated with a customer, and testing the revised file on a development environment associated with a customer. When code is memorialized in a Dev Instruction document and used with other customers, that is cross-use, regardless of where the lines of code were first typed.

289. Rimini’s use of Dev Instructions to replicate the same update in the retrofit or Kanban environments is cross-use, permitting Rimini to complete the work faster, using the solution it devised before creating the Dev Instruction. Indeed, if Rimini were not cross-using its updates across customers, it would have no need to create the Dev Instruction document at all.

9. Rimini Provided Files Resulting from Cross-Use to Customers Through Means Other Than TransferFiles.

290. Additionally, I have analyzed update documents that have been produced by Rimini customers in this case. Based on this analysis, it is my opinion that Rimini provides customers with update files through means other than TransferFiles and were very likely created through cross-use.

291. For instance, [REDACTED]

³⁰² ECF No. 1297 (Rimini’s Dec. 16, 2019 Opposition to Oracle’s Motion to Compel) at 12 (emphasis omitted).

³⁰³ ECF No. 1297 (Rimini’s Dec. 16, 2019 Opposition to Oracle’s Motion to Compel) at 22.

in the Post-Injunction Period.³⁴¹ On [REDACTED], [REDACTED]

_____, stating that _____.

317. [REDACTED] .³⁴⁴ A subsequent comment to

shows that

On _____

345

”³⁴⁶ Thus, in addition to

_____, Rimini _____

██████████: first, into a ██████████

2. *Rimini continues to Cross-Use Oracle's JD Edwards software*

³⁴⁰ Mackereth Rule 30(b)(6) Depo., Ex. 1842, (“[REDACTED]”); Mackereth Rule 30(b)(6) Depo. at 207:9-208:1.

³⁴¹ Rimini's Dec. 27, 2019 2nd Suppl. Resp. to Interrog. No. 3, Ex. A-1 (showing [REDACTED] was a Rimini customer for JD Edwards from [REDACTED]).

³⁴² RSI007374245 at 245-246.

³⁴³ ORCLRS1358420 (); ORCLRS1358942 ().

³⁴⁴ Mackereth Rule 30(b)(6) Depo., Ex. 1842, [REDACTED]”).

³⁴⁵ RSI007455731 at 736, 733.

³⁴⁶ RSI007455731 at 733.

320. First, Rimini's development practices continue to involve using one Oracle JD Edwards software environment to develop and test updates for other customers, including the use of the Oracle's Object Management Workbench development tool. For instance, [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] Meanwhile, [REDACTED]
[REDACTED]
[REDACTED]³⁴⁹ Despite this lack of access, [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]⁰

321. Rimini's cross-use of Oracle JD Edwards software to develop the RS18JDEUSF09 and RS18JDEUSP09 updates is further supported by Rimini's Jira records. Notably, Rimini's Jira records identify [REDACTED] and [REDACTED] as the Scrum customers for the RS18JDE-US-P09 update. These records show that Scrum development, testing, and delivery for this update was finished by [REDACTED]³⁵¹ Meanwhile, the records associated with the [REDACTED] show that five development related tasks were all changed to a [REDACTED] [REDACTED] which as mentioned [REDACTED]

³⁴⁷ RSI007407738; *See also* RSI007399974 [REDACTED]; RSI007399969

[REDACTED]; RSI006850382 ([REDACTED])
[REDACTED] RSI006850371 ([REDACTED])

³⁴⁸ *Id.*

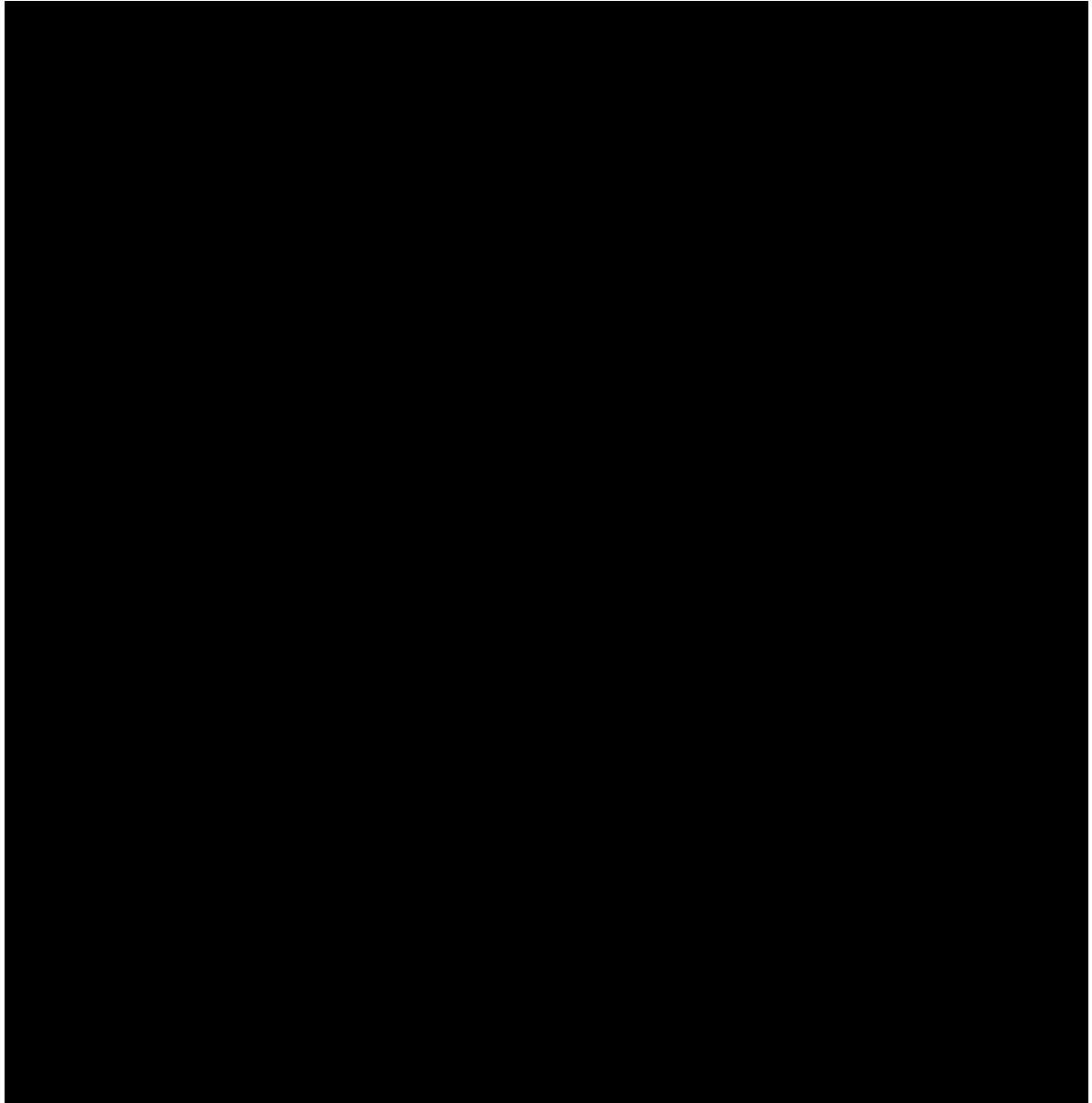
³⁴⁹ RSI007416318 at -321.

³⁵⁰ RSI007407738.

³⁵¹ *See* ORCLRSJIRA00000228 (JUSP-246), ORCLRSJIRA00000239 (JUSP-260), ORCLRSJIRA00000246 (JUSP-264), ORCLRSJIRA00000250 (JUSP-265), ORCLRSJIRA00000282 (JUSP-268), ORCLRSJIRA00000285 (JUSP-269), ORCLRSJIRA00000290 (JUSP-270), ORCLRSJIRA00000294 (JUSP-271), Ex. 67 (JUSP-273), Ex. 68 (JUSP-274), Ex. 69 (JUSP-275), Ex. 70 (JUSP-276), Ex. 71 (JUSP-278), Ex. 72 (JUSP-279), Ex. 73 (JUSP-347), Ex. 74 (JUSP-348), Ex. 75 (JUSP-349), and Ex. 76 (JUSP-350).

[REDACTED]³⁵².

322. My analysis has found that Rimini continues to cross-use Oracle JD Edwards software environments to develop highly detailed technical specification documents that it uses to implement code changes in Oracle JD Edwards software environments associated with other customers. And, as shown in the excerpt of the technical specification for Jira update ID JUSP-615 shown below,³⁵³ Rimini still copies screenshots of actual code into these documents.



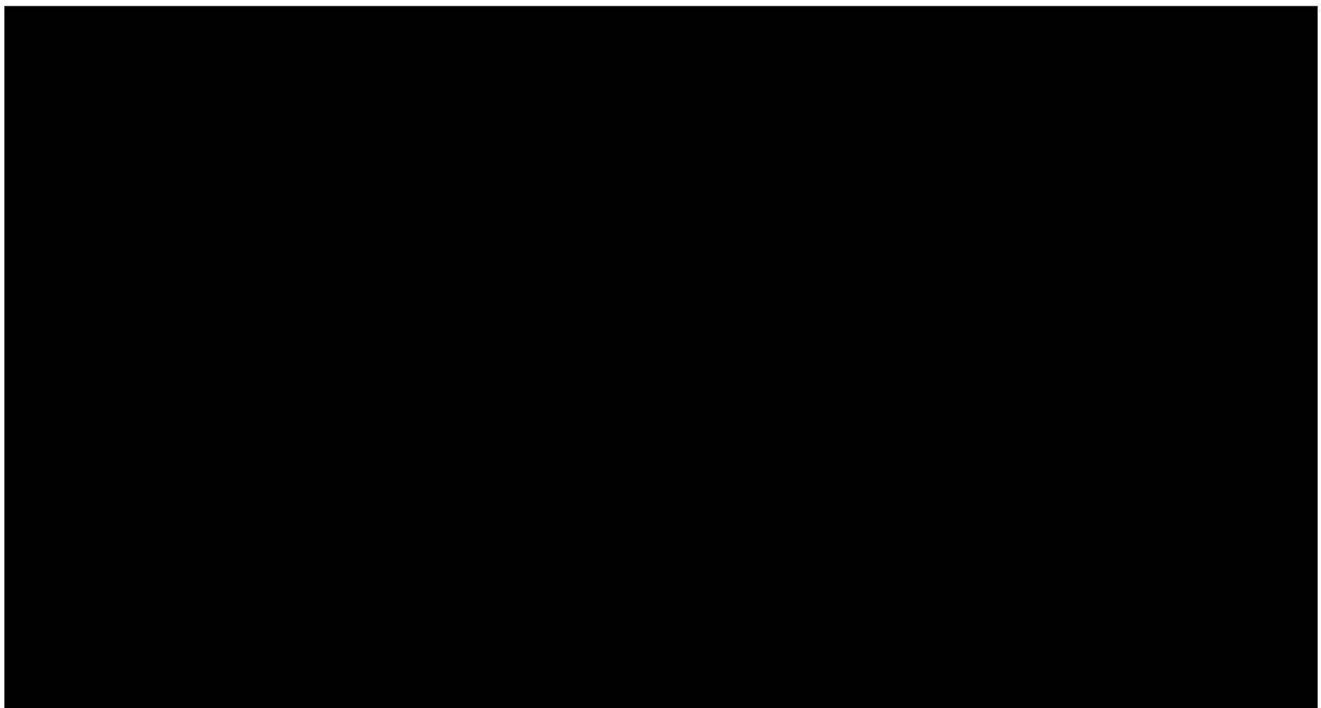
³⁵² See Ex. 77 (JUSP-357), Ex. 78 (JUSP-358), Ex. 79 (JUSP-359), Ex. 80 (JUSP-487), and Ex. 81 (JUSP-489).

³⁵³ ORCLRSJIRA00010701 ([REDACTED]) (downloaded from JIRA record JUSP-615)).

3. *Rimini continues to develop derivative works based upon JD Edwards software.*

323. My analysis in *Rimini II* found that Rimini's updates extend the functionality of Oracle's JD Edwards software. My review of contemporaneous records produced by Rimini in this case have led me to conclude that this was still the case in the Post-Injunction Period.

324. For instance, the technical document titled "[REDACTED]" which was uploaded to the Jira page associated with the update JITF-102, contains several screenshots, including the one below from page 13, that show how this program extends the functionality of the JD Edwards software by adding new features, forms, and user interfaces. These screenshots also show that Rimini's updates are extensions that depend on the underlying JD Edwards software.



E. RIMINI'S ONGOING DISTRIBUTION OF PEOPLESOFT AND JD EDWARDS SOFTWARE AND SUPPORT MATERIALS VIOLATES THE INJUNCTION

325. In addition to, and often in connection with, copying PeopleSoft and JDE environments and files, Rimini has frequently distributed PeopleSoft and JD Edwards Software and Support Materials and related derivative works during the Post-Injunction Period. Such distribution includes the individual files discussed above. Other than these individual files, the

A. HCM200255

365. The Rimini update HCM200255 modified the files [REDACTED] [REDACTED] for a change in the OR Transit Tax.⁴⁰⁷ The update HCM200255 was tracked in Jira, under a few different entries. I analyzed these Jira entries and their attachments, the Dev Instructions for this update, and the contemporaneous emails among Rimini employees working on this update. These records show that after Rimini devised the update in the Scrum environments, it was able to leverage that effort to complete the Kanban environments with less work and in less time. It is my opinion that this update shows that Rimini street used an environment associated with a first customer to create the Dev Instructions, and then cross-used this work with other customers.

366. The Scrum entry for HCM200255, PUSP-13338 was created [REDACTED]⁴⁰⁸ On the first page, it shows that [REDACTED]. On the third page, it shows that the [REDACTED] were [REDACTED]

367. The third and fourth pages also show that the Scrum development or prototype environments for this updates were [REDACTED], [REDACTED], [REDACTED], and [REDACTED].⁴⁰⁹ These customer acronyms refer to [REDACTED], [REDACTED], [REDACTED], and [REDACTED].⁴¹⁰ It is consistent with my previous report to note that at least [REDACTED] and [REDACTED] are located on [REDACTED], which Rimini developers often favor for prototype environments because of how easy they are to access.⁴¹¹

368. That these were the prototype environments is corroborated by RSI007187828, a November 7, 2018 email with the subject line “[REDACTED] [REDACTED]” In it, Rimini employee Michael Johnson states that [REDACTED]
[REDACTED]

⁴⁰⁷ Mackereth Rule 30(b)(6) Depo., Ex. 1844 ([REDACTED] ORCLRSJIRA00000013); Mackereth Rule 30(b)(6) Depo. at 227:6-240:15.

⁴⁰⁸ Mackereth Rule 30(b)(6) Depo., Ex. 1844.

⁴⁰⁹ Mackereth Rule 30(b)(6) Depo. at 233:817.

⁴¹⁰ RSI007390616; Ex. 35 ([REDACTED]) [RSI_AFW005]; Ex. 36 ([REDACTED]) [RSI_AFW005]; Ex. 37 ([REDACTED]) [RSI_AFW005].

⁴¹¹ Rimini’s Dec. 27, 2019 Third Suppl. Resp. to Interrog. No. 4 at p. 9 (listing [REDACTED] and [REDACTED]); Rimini II, Nov. 18, 2016 Deposition of Susan Tahtaras (“Tahtaras Depo.”), Ex. 80 (noting in the “[REDACTED], “[REDACTED]”); Rimini II, Tahtaras Depo. at 160:1-161:6.

[REDACTED]⁴¹² Another email, RSI007049813, subject line “ [REDACTED]

[REDACTED] send [REDACTED], shows that [REDACTED]

[REDACTED]⁴¹³ Rimini employee Michael Johnson offers to [REDACTED]

[REDACTED]⁴¹⁴ Michael Johnson [REDACTED] RSI007046653, [REDACTED] and [REDACTED]

[REDACTED] He note that [REDACTED]

[REDACTED]⁴¹⁵ This suggests to me that Rimini was using [REDACTED] as a Scrum environment, even though it was not yet slated to receive the update early, like [REDACTED]

369. The testimony of Rimini’s corporate representative is consistent with this analysis. He testified that [REDACTED]

[REDACTED]⁴¹⁶ This confirms prototype environments may be selected based on whether [REDACTED]

370. The attachments to this entry include [REDACTED], a spreadsheet listing [REDACTED], and a [REDACTED] which shows that Rimini [REDACTED]⁴¹⁷ An email is also attached, entitled [REDACTED]

⁴¹² RSI007187828 at 829.

⁴¹³ RSI007049813 at 814-15.

⁴¹⁴ RSI007049813.

⁴¹⁵ RSI007046653 at 553-54.

⁴¹⁶ Mackereth Rule 30(b)(6) Depo. at 236:17-237:4.

⁴¹⁷ Mackereth Rule 30(b)(6) Depo., Ex. 1844 at ORCLRSJIRA00000015 (listing attachments ORCLRSJIRA000008639 ([REDACTED]), ORCLRSJIRA00007190 ([REDACTED]), ORCLRSJIRA00007473 ([REDACTED]), ORCLRSJIRA00007636 ([REDACTED])

[REDACTED] This email contains [REDACTED]
[REDACTED]. As discussed below and elsewhere in this report, Rimini's Dev Instructions frequently refer to [REDACTED]
[REDACTED], demonstrating that such code must be used when creating the Dev Instructions.

371. I understand that Rimini produced a draft Dev Instruction for this update.⁴¹⁸ I reviewed this document and note that in several places, the document directs the reader to [REDACTED]. For example, page 1 says that [REDACTED] [REDACTED] the top of page 2 says [REDACTED] [REDACTED]” and the bottom of page 1 says [REDACTED] Because these [REDACTED] could not be divined, and likely not even memorized without being logged into an environment at the same time, it is my opinion that Rimini used an environment associated with a customer to create these instructions. As noted above, I understand that [REDACTED]

419

372. A further update email from [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] ⁴²⁰ As part of this testing, [REDACTED]
[REDACTED]
[REDACTED] ⁴²¹ From her
statements that [REDACTED] I conclude that
[REDACTED], because Rimini does not have a PeopleSoft environment, and
then somehow transferred them to Rimini's servers. It is not clear from the records made
available to me how this was accomplished, but it calls into question Rimini's claims that it does
not copy materials from development environments to its own servers.

418 RSI006954036.

⁴¹⁹ ECF No. 1297 (Rimini's Dec. 16, 2019 Opposition to Oracle's Motion to Compel) at 22.

420 RSI007047273

421 RSI007048066

373. As shown on pages 3-4 of PUPS-13338, on December 21, 2018, Rimini employee Michael Johnson [REDACTED]
[REDACTED]⁴²² This Story entry is PUSP-14252, the Kanban Jira entry for HCM200255, created December 21, 2018, which is the same date as Michael Johnson entry in PUSP-13338.⁴²³ There appear to be no edits to this entry after initial creation date until February 4, 2019.

374. Emails among Rimini employees confirm that Rimini's process of Scrum/prototyping took longer than Kanban/retrofitting (cross-use), and overall saved Rimini significant time over developing each update individually. An email from [REDACTED]
[REDACTED] "sought [REDACTED]
[REDACTED]⁴²⁴ In an instant message conversation between her and Rimini employee Jeff Allen on the same day, she notes that [REDACTED]
[REDACTED].⁴²⁵ Allen [REDACTED]
[REDACTED] and responds [REDACTED]
[REDACTED]⁴²⁶ I note that at this point, the [REDACTED]
[REDACTED]
[REDACTED] and not [REDACTED]. In another email on the same day, Tahtaras and Syed Khari, [REDACTED]
[REDACTED].⁴²⁷ Tahtaras asks Khari [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] This appears to be [REDACTED]
[REDACTED] Next, Tahtaras asks [REDACTED]
[REDACTED]. [REDACTED] per customer is significantly shorter than the time it took for Rimini to complete the Scrum customers, reflecting

⁴²² Mackereth Rule 30(b)(6) Rule 30(b)(6) Depo., Ex. 1844 (PUSP-13338–Scrum Jira entry for HCM200255 (ORCLRSJIRA00000013)).

⁴²³ ORCLRSJIRA00000075 (PUSP-14252, Kanban Jira entry for HCM200255).

⁴²⁴ RSI007063855.

⁴²⁵ *Rimini II*, Nov. 15, 2017 Deposition of Tim Conley ("Conley Depo.") at 98:22-24; 99:21-25; 147:18-22.

⁴²⁶ RSI007149660.

⁴²⁷ RSI007171814 [REDACTED]

the benefit to Rimini of cross-use.

375. Other Jira entries for HCM200255 are PUSP-13364, the Update entry for HCM200255, created November 7, 2018, and PUSP-13365, the Epic Jira entry for HCM200255, created November 7, 2018, two minutes after PUSP-13364 was created.

376. Delivery of HCM200255 is evidenced by, among other documents, the RS19P01 TUSS, and a [REDACTED]

[REDACTED] which shows they [REDACTED]

[REDACTED].⁴²⁸

B. HCM200440/HCM200511.

377. The Rimini update HCM200511 was a parent update that included HCM200500. As discussed below, this update had a lengthy Scrum and a very short Kanban, further evidencing Rimini's cross-use of development environments to implement this update. In addition, documents associated with this update show that Kanban is given very explicitly and detailed instructions for how to implement the update, lending further evidence to the idea that the Scrum is where Rimini's development work takes place, and is then simply replicated in Kanban customers. Finally, this update also serves as an example of Rimini updating and re-distributing Dev Instructions after a mistake has been discovered in an initial version.

378. The Jira entry for the Scrum for HCM200440 can be found at PUSP-16095.⁴²⁹ Page 1 indicates that the Update ID for this entry is HCM200440, that it was created on April 25, 2019, and that it was resolved on June 10, 2019. The Kanban entry can be found at PUSP-16643.⁴³⁰ The description on page 2 of PUSP-16643 [REDACTED]

[REDACTED]. The first page of this JIRA entry indicates that it was created on June 4, 2019 and resolved on June 17, 2019.

379. A June 9, 2019 [REDACTED]

⁴²⁸ RSI007176733 [REDACTED]; RSI007176731 [REDACTED] (email attaching RSI007176733); RSI007171822. *See also* Mackereth Rule 30(b)(6) Depo., Ex. 1845 (RSI007175900 and RS19P02 TUSS); Mackereth Rule 30(b)(6) Depo. at 240:17-242:25.

⁴²⁹ ORCLRSJIRA00000121 (PUSP-16095, Jira entry for HCM200440 Scrum).

⁴³⁰ ORCLRSJIRA00000460 (PUSP-16643–Jira entry for HCM200440 Kanban).

addresses PUSP-16095 and PUSP-16643, above.⁴³¹ In particular, Rimini Employee Mike Broz tells [REDACTED]

[REDACTED] A separate email thread involving Mike Broz and Rimini employee Don Sheffield note that [REDACTED]

[REDACTED]⁴³²

C. JDE105328

380. The Rimini update JDE105328 was an update to both JD Edwards EnterpriseOne and JD Edwards World intended to modify [REDACTED]

[REDACTED]⁴³³ According to the technical documentation, this update required that the [REDACTED], [REDACTED], and [REDACTED] and [REDACTED], [REDACTED], and [REDACTED]

[REDACTED]⁴³⁴ While the technical specification includes [REDACTED] the metadata for the document states that it was [REDACTED].⁴³⁵ Rimini provided this update, as part of [REDACTED], to a number of customers, including [REDACTED]⁴³⁶ For JD Edwards A9.3 customer [REDACTED] in particular, Rimini engineer Michael Jacob completed the update on [REDACTED] and delivered it to them on [REDACTED]

381. As shown below, Rimini's technical specification contains and refers to copies of source code from Oracle source member [REDACTED]. It is my opinion that the technical specification document for JDE105328 was created by copying JD Edwards source code into memory and, to a lesser extent, into the technical specification itself. It is also my opinion that

⁴³¹ RSI007041886.

⁴³² RSI007042001 [REDACTED]; RSI007298620, [REDACTED]

⁴³³ Ex. 41 RSI007981483 [REDACTED] at 485.

⁴³⁴ Ex. 41 RSI007981483 [REDACTED] at 529-530

⁴³⁵ Ex. 41 RSI007981483 [REDACTED] at 483.

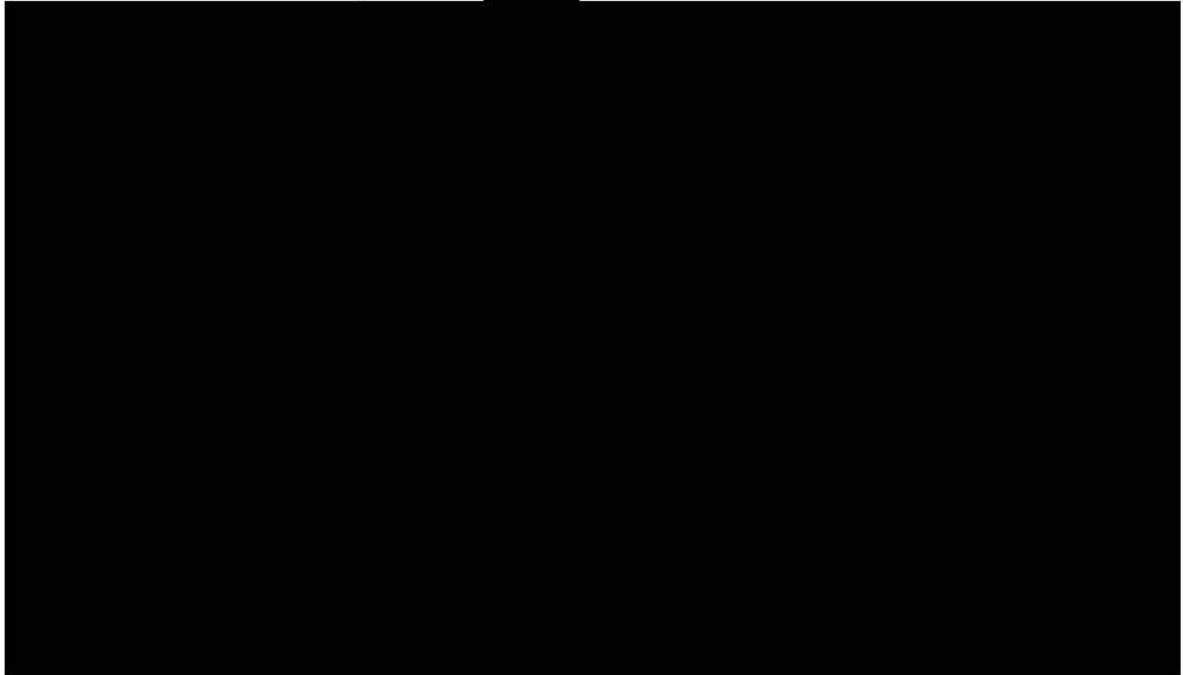
⁴³⁶ RSI007409524 [REDACTED] at 524, 527.

⁴³⁷ RSI007401373 [REDACTED] at 375 [REDACTED]

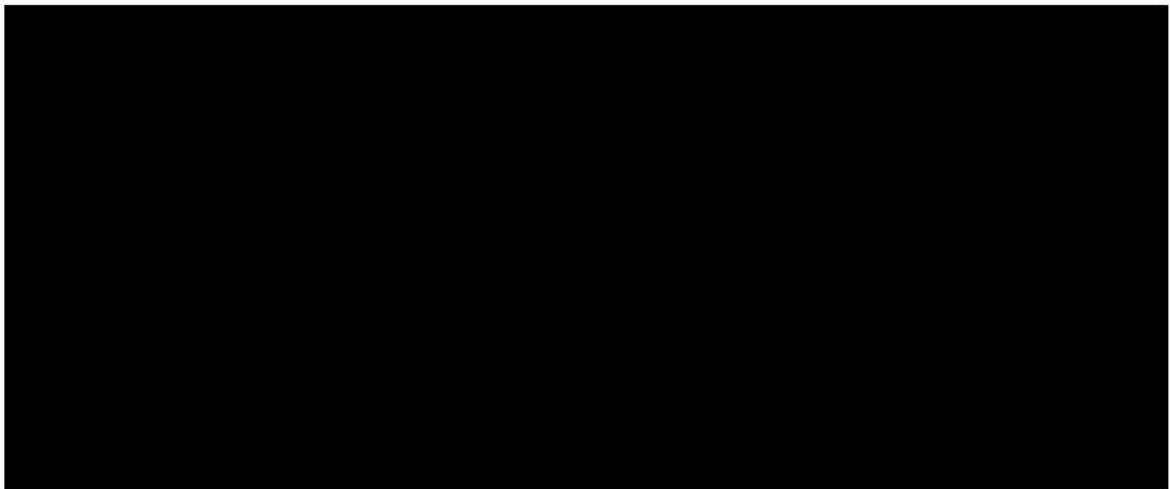
RSI007409516 [REDACTED]
[REDACTED] at 516.

Rimini copied and modified JD Edwards source code each time it implemented this update. The excerpts below alternate between excerpts of [REDACTED] of Rimini's technical specification, titled "[REDACTED],"⁴³⁸ and excerpts of Oracle source code from source member [REDACTED] from the GA release of JD Edwards World A9.3.⁴³⁹

1. Discussion of Section [REDACTED]⁴⁴⁰



2. Source code excerpts from section [REDACTED] of [REDACTED]⁴⁴¹

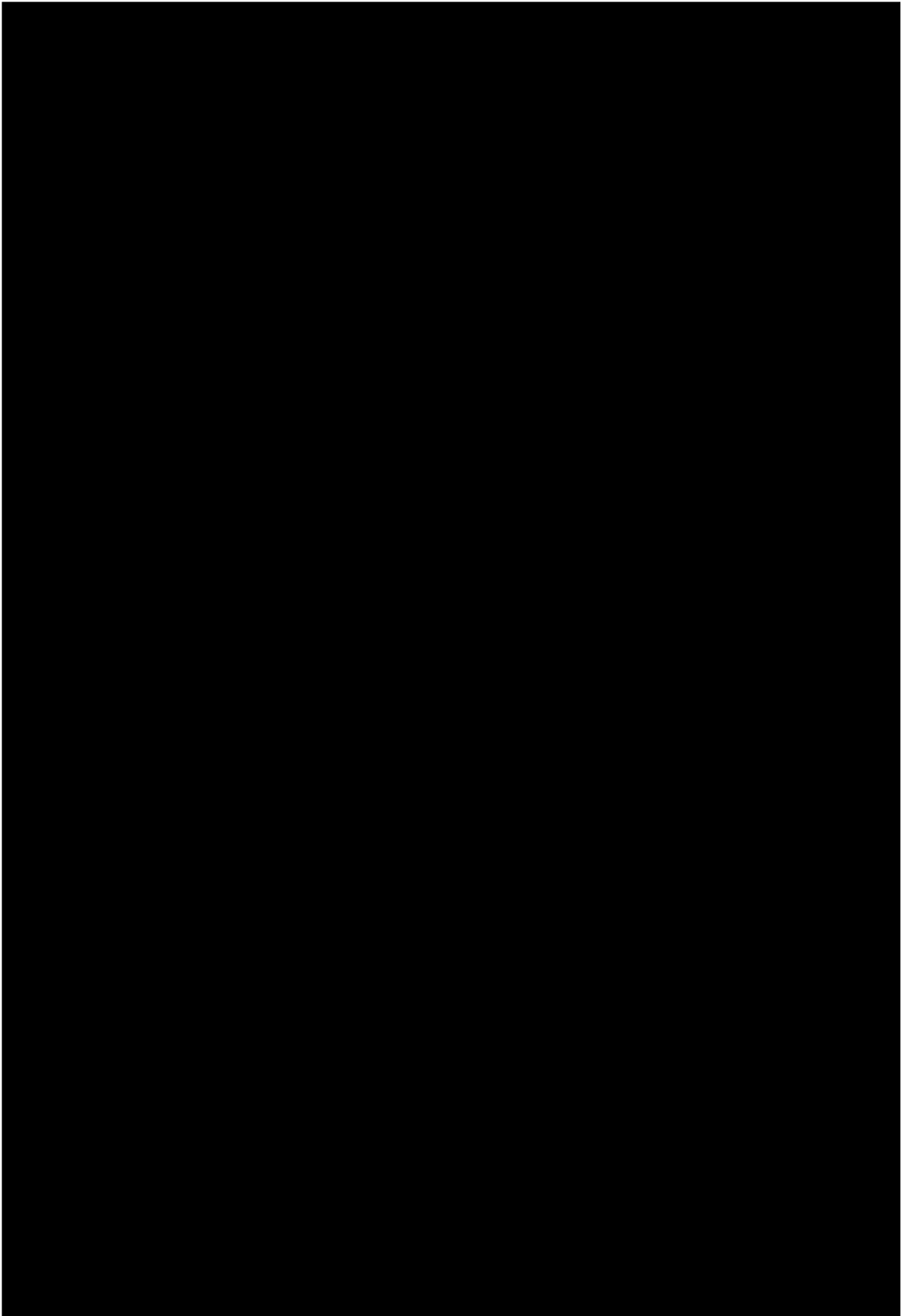


⁴³⁸ Ex. 41 RSI007981483 ([REDACTED]) at 515.

⁴³⁹ *Id.* ("[REDACTED]").

⁴⁴⁰ Ex. 41 RSI007981483 ([REDACTED]) at 518.

⁴⁴¹ *Id.* ([REDACTED]). Blank columns immediately before the date at the end of each line reproduced here were removed for formatting purposes only.



[REDACTED]

3. *Discussion of Section* [REDACTED]

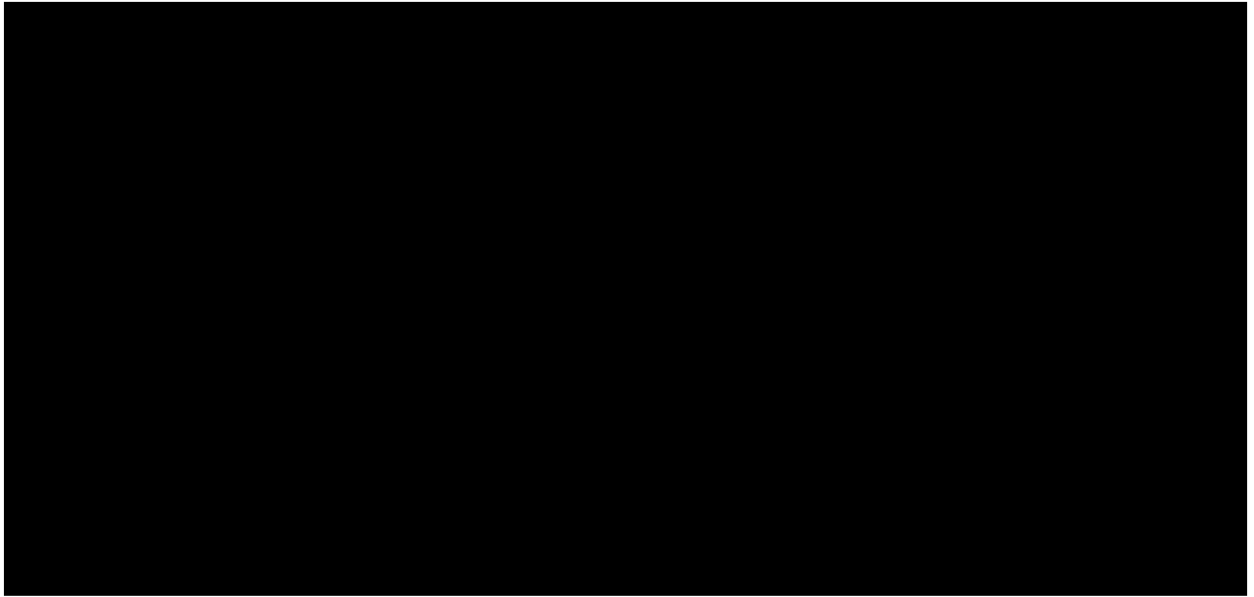
[REDACTED]

4. *Source code excerpts from* [REDACTED]

[REDACTED]

⁴⁴² Ex. 41 RSI007981483 [REDACTED] at 519.

⁴⁴³ *Id.* ([REDACTED]).



5. *Discussion of Section* [REDACTED]⁴⁴⁴

[REDACTED]

6. *Source code excerpts from section* [REDACTED] *of* [REDACTED]⁴⁴⁵

[REDACTED]

D. ORACLE MATERIALS ON SALESFORCE

372. I identified a number of files in Rimini's Salesforce production that are identical or highly similar to Oracle PeopleSoft software files found both in Oracle GA productions and in

⁴⁴⁴ Ex. 41 RSI007981483 ([REDACTED]) at 520.

⁴⁴⁵ *Id.* ([REDACTED]).

Rimini generates [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED].⁴⁷⁰ To the extent Rimini produces any such reports, I reserve the right to supplement my report accordingly.

Barbara Frederiksen - Cross

Barbara Ann Frederiksen-Cross
May 20, 2020

⁴⁷⁰ Mackereth Rule 30(b)(6) Depo. at 73:20-74:16.